

USSN 10/780,428

2

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Amendments to the Claims

Please amend claims 1 and 10 without prejudice or disclaimer, as indicated in the following Listing of Claims.

Listing of Claims

1. (Currently amended) A pump for pumping fluid comprising:
a ring cam having a central axis, configured to rotate about an axis of rotation coincident with the central axis, and surrounding a pump head having a major axis. said pump head defining two parallel plunger boars extending therethrough, said plunger boars arranged on opposing sides of the major axis, separated from the major axis by an offset, each having the same off-set from the major axis, and having a common bore axis plane substantially transverse to the central axis, each plunger boar having two or more pairs a pair
of plungers,

each pair of plungers comprising a first plunger and a second plunger, each plunger being reciprocable within a respective plunger bore defined by a housing, the respective plunger bores being in communication with one another by way of a connecting passage,

wherein each pair of first and second plungers, together with their respective plunger bores, defines, at least in part, a pumping volume,

each pair of plungers performing, in use, a pumping cycle, and each pair of plungers having a respective inlet port and outlet port,

wherein an end of each said first plunger is arranged to cover its respective inlet port during a pump delivery stage in which fluid is displaced from the pumping volume,

wherein an end of each said second plunger is arranged to cover its respective outlet port during a pump fill stage in which fuel is drawn into the pumping volume,

wherein the end of each said first plunger and the end of each said second plunger are arranged to cover the inlet port and outlet port respectively during a pump transfer stage during which the pumping volume is maintained,

wherein each pair of first and second plungers are aligned along a respective common bore axis, ~~each of said respective bore axes being oriented along a common bore axis plane,~~

USSN 10/780,428

3

and each said pair of first and second plungers mounted in opposed in-line formation within said housing, pump head, and

wherein each of said two or more pairs of plungers are plunger is coupled to a shoe that embraces a respective roller that is in contact with, and is thus driven by the ring cam, a single cam ring that is configured to rotate about an axis of rotation oriented substantially transverse to said common bore axis plane.

2. (Cancelled) A pump according to claim 1, wherein the first and second plungers are aligned along a common axis.

3. (Cancelled) A pump according to claim 1, wherein the first and second plungers are driven by means of a single cam ring.

4. (Withdrawn) A pump according to claim 1, wherein the first and second plungers are in a parallel-spaced relationship within their respective plunger bores, their respective plunger bores are in communication with one another by way of a connecting passage.

5. (Previously presented) A pump according to claim 1, wherein the first and second plungers are adapted to only partially cover the inlet and outlet ports respectively.

6. (Cancelled) A pump according to claim 1, wherein the pump comprises two or more pairs of plungers, each pair of plungers performing, in use, a pumping cycle and each pair of plungers having a respective inlet and outlet port.

7. (Previously presented) A pump according to claim 1 wherein a pumping cycle phase difference of 115° to 130° exists between movement of the plungers of each plunger pair.

8. (Previously presented) A pump according to claim 1 wherein a pumping cycle phase difference of 120° exists between movement of the plungers of each plunger pair.

USSN 10/780,428

4

9. (Previously presented) A pump according to claim 1 wherein a pumping cycle phase difference of 130° exists between movement of the plungers of each plunger pair.

10. (Currently amended) A pump for pumping fluid comprising:
a ring cam having a central axis, configured to rotate about an axis of rotation coincident with the central axis, and surrounding a pump head having a major axis, said pump head defining two parallel plunger boars extending therethrough, said plunger boars arranged on opposite sides of the major axis and separated from the major axis by an offset, each having the same off-set from the major axis and having a common bore axis plane substantially transverse to the central axis, each plunger boar having two or more pairs a pair of plungers,

each pair of plungers performing, in use, a pumping cycle and comprising a first plunger and a second plunger and having a respective inlet and outlet port, each of the first plunger and the second plunger being reciprocable within a respective plunger bore defined by a housing;

wherein the first plunger and the second plunger of each pair define, together with their respective bores, a pumping volume;

an end of the first plunger of a pair is arranged to cover the inlet port during a pump delivery stage in which fluid is displaced from the pumping volume;

an end of the second plunger of a pair is arranged to cover the outlet port during a pump fill stage in which fuel is drawn into the pumping volume;

wherein the end of the first plunger and the end of the second plunger of a pair are arranged to cover the inlet port and outlet port respectively during a pump transfer stage during which the pumping volume is kept substantially constant;

wherein each said pair of plungers is mounted in opposed in-line formation within said housing, pump head, and

wherein said pairs of plungers are each plunger is coupled to a shoe that embraces a respective roller that is in contact with, and is thus driven by the ring cam-a single cam ring configured to rotate about a central axis, and

wherein said plunger bores are arranged in a single plane oriented substantially transverse to said central axis.

USSN 10/780,428

5

11. **(Previously presented)** A pump according to claim 1, wherein each said inlet port is connected to the outlet of a transfer pump.
12. **(Previously presented)** A pump according to claim 1, wherein each said outlet port is connected to a common rail fuel delivery system of an internal combustion engine.
13. **(Currently amended)** A pump according to claim 1, further comprising biasing means configured and positioned so as to urge said plungers in a radially outward direction so as to maintain said rollers in substantially constant contact with said cam ring as said cam ring rotates about said axis of rotation.
14. **(Previously presented)** A pump according to claim 13, said biasing means comprising a resilient member.
15. **(Previously presented)** A pump according to claim 13, said biasing means comprising a volume of fluid positioned within said respective plunger bores, said fluid being pressurized so as to urge said plungers in a radially outward direction relative to said axis of rotation.
16. **(Currently amended)** A pump according to claim 1, wherein said housing remains stationary while said cam ring rotates about said axis of rotation so as to impart reciprocating motion to said plungers.
17. **(Previously presented)** A pump according to claim 1, wherein said inlet port and said outlet port are positioned diametrically opposite one another along a respective bore so as to balance forces during said pump fill and delivery stages.
18. **(Previously presented)** A multi-stage fluid pump comprising a plurality of pumps according to claim 1, said plurality of pumps being arranged in series and thus axially spaced along said axis of rotation.